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(54) **VEHICLE CONTROLS INCLUDING DYNAMIC VEHICLE PARAMETER DETERMINATION**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

Apparatuses, methods, systems and controls including dynamic vehicle parameter determination are disclosed. One embodiment is a method of operating a vehicle system including a powertrain comprising a prime mover structured to propel the vehicle, and an electronic control system in operative communication with the prime mover and the transmission. The method includes estimating a plurality of coefficients of a vehicle loss model, evaluating a convergence criterion for the plurality of estimated coefficients, setting converged values of the plurality of coefficients if the convergence criterion is satisfied, determining a vehicle powertrain command utilizing the converged values of the plurality of coefficients, and transmitting a vehicle powertrain command to control operation of one or more powertrain components.

20 Claims, 4 Drawing Sheets